

Remarks/Arguments

The present submission is made in response to the final Office Action of October 10, 2006, identified as Paper No. 20060928 and in combination with Applicant's present Request for Continuing Examination (RCE). Claims 1-4 and 7-17 remain pending in the present application.

In the Action, the Examiner rejected claims 1-4 and 7-17 under 35 U.S.C 103(a) as being unpatentable over U.S. Patent No. 4,092,629 to Siems et al ("*Siems*") in view of U.S. Patents No. 6,091,670 to Oliver, et al ("*Oliver*") or U.S. Patents No. 5,200,930 to Rouquette ("*Rouquette*").

I. The Finality of Pending Office Action is Improper

In the previous reply, Applicant amended claim 1 to include limitations that were *previously recited in several of the dependent claims* and had not been addressed by the Examiner, and entered arguments explaining the patentability of the claimed invention. In response, the Examiner entered "new ground(s) of rejection" and held Applicant's arguments to be moot. *See* Office Action dated October 10, 2006 at page 3. In fact, the primary reference now relied on by the Examiner was not cited in the first Office Action, thereby denying Applicant a fair opportunity to respond to the new rejection. *See In re Kumar*, 418 F.3d 1361 (Fed. Cir. 2005).

As Applicant's amendments could not have necessitated the new ground of rejection (the claim amendments were directly strictly to matter *already pending* in the claims) and Applicant did not necessitate that new rejection with information supplied in an Information Disclosure Statement, the Examiner's decision to declare the pending Office Action as final is completely improper. MPEP 706.07(d) ("Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted

in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p)"). Applicant therefore respectfully requests withdrawal of the finality of the pending Office Action and a full refund of the fees associated with having to file the present RCE. MPEP 706.07(d) ("If, on request by applicant for reconsideration, the primary examiner finds the final rejection to have been premature, he or she should withdraw the finality of the rejection").

II. Rejection of Claims 1-4 and 7-11 under 35 U.S.C. § 112

Claim 1 has been amended to correct the antecedent basis problem.

III. Rejections under 35 U.S.C. § 103 over *Siems* in view of *Oliver* or *Rouquette*

According to the Examiner, *Siems* discloses the claimed an elongated member having an insulated conductor and a coaxial cable extending therein. *Siems* also purportedly discloses a plurality of sensors, an electrical power source, and a control element. The Examiner failed, however, to point out with any particularity where these elements may be found in *Siems*. The Examiner acknowledged that *Siems* does not disclose inductively coupling the power source to the sensing elements, and argues that one of ordinary skill in the art would be motivated to do so in *Siems* based on the teaching of *Oliver* and *Rouquette* because it "provides the advantage of lessening the size of the external devices (i.e., sensors)."

Siems describes a towed array having a plurality of sensors positioned along a cable assembly, wherein each sensor transmits on a separate signal channel. Col. 2, lines 56-68. The cable assembly actually comprises multiple, individual segments that are interconnected by a series of connector modules. Col. 6, lines 43-59. Each sensor includes individual data lines 58, 60 that joint a central cable bundle 52. Col. 7, lines 49-51. Central cable bundle 52 is connected to the connector module 13, which includes a transceiver for digitizing the signals from the

sensors and transmitting the digitized signals through cable bundle 52 to the vessel. Col. 9, lines 11-29. The central cable bundle 52 comprises a data link (three coaxial cables), an interrogation link (three twisted wire pairs), two command links (two twisted wire pairs), two test lines (twisted wires), and a power transmission line (two twisted wire pairs connected in parallel for transmitting AC power). Col. 10, lines 19-33. The pressure transducers of the sensors appear to be powered directly from the two twisted wire pairs connected in parallel for transmitting AC power. Col. 17, line 51 – col. 18, line 37.

As correctly noted by the Examiner, *Siems* also fails to disclose the claimed means for (or step of) inductively coupling said power source to said sensing elements to provide electrical power for operation of said sensing elements. The Examiner failed to recognize that *Siems* also fails to disclose the claimed insulated conductor connected to the power source. Instead, *Siems* discloses the use of dual twisted wire pairs for transmitted AC power. Thus, the proposed combination of *Siems* and *Oliver* or *Rouquette*, if properly motivated, still lacks an express claim element and therefore cannot render the claimed invention obvious under 35 U.S.C. § 103.

MPEP § 2143.03 (“To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art”).

The rejection under 35 U.S.C. § 103 is also improper because the purported motivation relied on by the Examiner to encourage the combination of *Siems* with *Oliver* or *Rouquette* is legally insufficient to suggest the proposed combination. In particular, the motivation identified by the Examiner is completely pointless as *Siems* does not use batteries to power the sensors. See MPEP § 2143.02 (motivation or suggestion must have some reasonable expectation of success). To the extent that either *Oliver* or *Rouquette* do teach inductively coupling to power the sensors to save space (*i.e.*, by eliminating the need for local battery power), that motivation

has no application to *Siems*, which does not use batteries. In fact, *Siems* could not be modified as suggested by the Examiner because the reference discloses the use of use of dual twisted wire pairs strictly for transmitting AC power, which do not allow for inductively coupling. See MPEP 2143.01(IV) (“If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification”). Accordingly, the motivation proposed by the Examiner is insufficient to support the proposed combination of *Siems* with *Oliver* or *Rouquette*, and the obviousness rejection must be withdrawn.

A Request for Continuing Examination (RCE) along with the appropriate fee are submitted herewith.

In view of the amendments made herein as supported by these foregoing remarks, the Examiner’s reconsideration is respectfully requested. Should the Examiner believe an interview would expedite prosecution of this application, please contact the undersigned at 315-218-8515.

Respectfully submitted,

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